**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor(s) John C. Harvey, James W. Cuddihy

Serial No.: 08/056,501

Filing Date: 3 May 93

For: Signal Processing Apparatus and Methods

Group Art Unit: 2202

Examiner: D. Cain

Commissioner of Patents and Trademarks  
Washington D.C. 20231**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. Although all cited references may be relevant, Applicants would like to bring to the Examiner's attention U.S. Patent Nos. 4,396,947 to Cheung, 4,054,911 to Fletcher et al., 4,367,548 to Cotten et al., and 3,936,595 to Yanagimachi et al. Copies of the listed references are provided herewith.

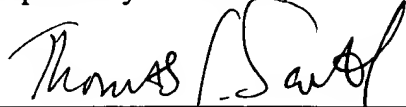
It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

**CERTIFICATION AND/OR FEE**

This IDS is being filed pursuant to 37 C.F.R. § 1.97(c) before the earlier of the mailing date of a final action or a notice of allowance. A check in the amount of \$200.00 is enclosed to cover the small entity fee for the IDS submission under 37 C.F.R. § 1.97(c). Please charge any additional fees required in connection with this

communication to the deposit account of **Howrey & Simon**, deposit account number **08-3038**. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

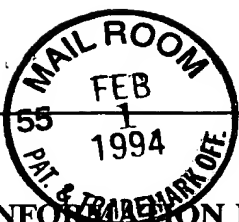
A handwritten signature in cursive script, appearing to read "Thomas J. Scott, Jr.", written in dark ink.

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Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: February 1, 1994

**HOWREY & SIMON**  
1299 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004-2402  
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

 Attorney Docket No.  
05634/007

 Serial No.  
08/056,501

 Applicant(s)  
John C. Harvey, James W. Cuddihy

 Filing Date  
3 May 93

 Group  
2202

**U. S. Patent Documents**

| Examiner Initial | Patent Number | Patent Date | Name               | Class / Subclass | Filing Date* |
|------------------|---------------|-------------|--------------------|------------------|--------------|
|                  | 2,511,085     | 13 Jun 1950 | Smith              | 179/1            |              |
|                  | 3,363,250     | 9 Jan 1968  | Jacobson           | 343/225          |              |
|                  | 3,569,937     | 9 Mar 1971  | Hoetter            | 340/171          |              |
|                  | 3,601,528     | 24 Aug 1971 | McVoy              | 178/5.1          |              |
|                  | 3,703,684     | 21 Nov 1972 | McVoy              | 325/31           |              |
|                  | 3,725,672     | 3 Apr 1973  | Reuter             | 307/208          |              |
|                  | 3,757,225     | 4 Sep 1973  | Ukicki             | 325/308          |              |
|                  | 3,790,700     | 5 Feb 1974  | Callais et al.     | 178/5.1          |              |
|                  | 3,806,814     | 23 Apr 1974 | Forbes             | 325/309          |              |
|                  | 3,835,387     | 10 Sep 1974 | Rookes et al.      | 325/55           |              |
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|                  | 3,936,595     | 3 Feb 1976  | Yanagimachi et al. | 178/5.6          |              |
|                  | 3,949,313     | 6 Apr 1976  | Tamada et al.      | 329/106          |              |
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|                  | 3,988,528     | 26 Oct 1976 | Yanagimachi et al. | 178/5.6          |              |
|                  | 4,054,911     | 18 Oct 1977 | Fletcher et al.    | 358/141          |              |
|                  | 4,205,343     | 27 May 1980 | Barrett            | 358/147          |              |
|                  | 4,225,967     | 30 Sep 1980 | Miwa et al.        | 455/68           |              |
|                  | 4,237,484     | 2 Dec 1980  | Brown et al.       | 358/142          |              |

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|--|-----------------|
| Examiner   | Date Considered |
| <b>Examiner:</b> Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |


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|------------------|---------------|-------------|--------------------|------------------|--------------|
|                  | 4,286,281     | 25 Aug 1981 | Suzuki             | 358/4            |              |
|                  | 4,329,675     | 11 May 1982 | Van Hulle          | 358/86           | 23 Sep 1980  |
|                  | 4,367,548     | 4 Jan 1983  | Cotten, Jr. et al. | 370/3            | 10 Apr 1980  |
|                  | 4,367,557     | 4 Jan 1983  | Stern et al.       | 455/4            | 25 May 1979  |
|                  | 4,388,645     | 14 Jun 1983 | Cox et al.         | 358/147          | 13 Apr 1981  |
|                  | 4,394,687     | 19 Jul 1983 | Hutt et al.        | 358/147          | 30 Apr 1980  |
|                  | 4,396,947     | 2 Aug 1983  | Cheung             | 358/124          | 26 Mar 1980  |
|                  | 4,449,247     | 15 May 1984 | Waschka, Jr.       | 455/9            | 30 Jul 1980  |

\* - If pertinent

**Foreign Patent Documents**

| Examiner Initial | Document Number | Publication Date | Country | Class / Subclass | Translation |    |
|------------------|-----------------|------------------|---------|------------------|-------------|----|
|                  |                 |                  |         |                  | Yes         | No |
|                  |                 |                  |         |                  |             |    |
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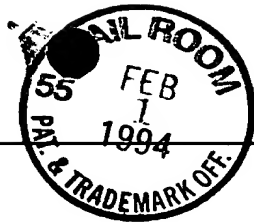


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| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> | Attorney Docket No.<br>05634/007                 | Serial No.<br>08/056,501 |
|  | Applicant(s)<br>John C. Harvey, James W. Cuddihy |                          |
|  | Filing Date<br>3 May 93                          | Group<br>2202            |

**Other Documents**

| Examiner<br>Initial | Author, Title, Date, Pertinent Pages, Etc.  |
|---------------------|---|
|                     | Barlow, "The Design of an Automatic Machine Assignment System", <u>Journal of the SMPTE</u> , July 1975, Vol. 84, p. 532-537.                           |
|                     | Barlow, "The Automation of Large Program Routing Switchers", <u>SMPTE Journal</u> , July 1979, Vol. 88, p. 493-497.                                     |
|                     | Barlow, "The Computer Control of Multiple-Bus Switchers", <u>SMPTE Journal</u> , September 1976, Vol. 85, p. 720-723.                                   |
|                     | Barlow, "The Assurance of Reliability", <u>SMPTE Journal</u> , February 1976, Vol 85, p. 73-75.   |
|                     | Barlow, "Some Features of Computer-Controlled Television Station Switchers", <u>Journal of the SMPTE</u> , March 1972, Vol. 81, p. 179-183.             |
|                     | Barlow et al., "A Universal Software for Automatic Switchers", <u>SMPTE Journal</u> , October 1978, Vol. 87, p. 682-683.                                |
|                     | Butler, "PCM-Multiplexed Audio in a Large Audio-Video Routing Switcher", <u>SMPTE Journal</u> , November 1976, Vol. 85, p. 875-877.                     |
|                     | Dickson et al., "An Automated Network Center", <u>Journal of the SMPTE</u> , July 1975, Vol. 84, p. 529-532.  |
|                     | Edmondson et al., "NBC Switching Central", <u>SMPTE Journal</u> , October 1976, Vol. 85, p. 795-805.  |
|                     | Flemming, "NBC Television Central - An Overview", <u>SMPTE Journal</u> , October 1976, Vol. 85, p. 792-795.   |
|                     | Horowitz, "CBS' New-Technology Station, WBBM-TV", <u>SMPTE Journal</u> , March 1978, Vol. 87, p. 141-146.   |
|                     | Krochmal et al., "Television Transmission Audio Facilities at NBC New York", <u>SMPTE Journal</u> , October 1976, Vol. 85, p. 814-816.                  |
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|                     | Mausler, "Video Transmission Video Facilities at NBC New York", <u>SMPTE Journal</u> , October 1976, Vol. 85, p. 811-814.                               |
|                     | Negri, "Hardware Interface Considerations for a Multi-Channel Television Automation System", <u>SMPTE Journal</u> , November 1976, Vol. 85, p. 869-872. |

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| <b>Examiner:</b> Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |



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|  | Applicant(s)<br>John C. Harvey, James W. Cuddihy |                          |
|  | Filing Date<br>3 May 93                          | Group<br>2202            |

**Other Documents**

| Examiner<br>Initial | Author, Title, Date, Pertinent Pages, Etc.  |
|---------------------|---|
|                     | Paganuzzi, "Communication in NBC Television Central", <u>SMPTE Journal</u> , November 1976, Vol. 85, p. 866-869.  |
|                     | Roth et al., "Functional Capabilities of a Computer Control System for Television Switching", <u>SMPTE Journal</u> , October 1976, Vol. 85, p. 806-811. |
|                     | Rourke, "Television Studio Design - Signal Routing and Measurement", <u>SMPTE Journal</u> , September 1979, Vol. 88, p. 607-609.                        |
|                     | Yanney, Sixty-Device Remote-Control System for NBC's Television Central Project", <u>SMPTE Journal</u> , November 1976, Vol. 85, p. 873-877.            |
|                     | Young et al., "Developments in Computer-Controlled Television Switches", <u>Journal of the SMPTE</u> , August 1973, Vol. 82, p. 658-661.                |
|                     | Young et al., "The Automation of Small Television Stations", <u>Journal of the SMPTE</u> , Oct. 1971, Vol. 80, p. 806-811.                              |
|                     | Zborowski, "Automatic Transmission Systems for Television", <u>SMPTE Journal</u> , June 1978, Vol. 87, p. 383-385.                                      |

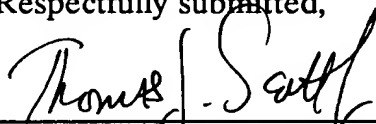
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CERTIFICATION AND/OR FEE

Since this IDS is being filed pursuant to 37 C.F.R. § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office action on the merits, no certification or fee is required.

Respectfully submitted,



Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: November 29, 1993

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